

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 September 2003 (18.09.2003)

PCT

(10) International Publication Number
WO 03/076929 A2

(51) International Patent Classification⁷: G01N 33/483

(21) International Application Number: PCT/CA03/00334

(22) International Filing Date: 11 March 2003 (11.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2,375,870 11 March 2002 (11.03.2002) CA

(71) Applicants (for all designated States except US): HER MAJESTY THE QUEEN IN RIGHT OF CANADA as represented by THE DEPARTMENT OF AGRICULTURE AND AGRI-FOOD CANADA [CA/CA]; 6000 C & E Trail, Lacombe, Alberta T4L 1W1 (CA). SUTTIE, James, M. [NZ/NZ]; Scroggs Hill Road, Dunedin (NZ).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SCHAEFER, Allan, L. [CA/CA]; P.O. Box 5451, Lacombe, Alberta T4L

1X2 (CA). LAWRENCE, Richard, A. [CA/CA]; 5124 - 60th Street Close, Lacombe, Alberta T4L 1M3 (CA). DESROCHES, Garry, B. [CA/CA]; 13416 - 56 Street, Edmonton, Alberta T5A 0P6 (CA). LEPAGE, Pierre [CA/CA]; P.O. Box 5441, Lacombe, Alberta T4L 1X1 (CA).

(74) Agent: MCKAY-CAREY, Mary, Jane; McKay-Carey & Company, 2590 Commerce Place, 10155-102 Street, Edmonton, Alberta T5J 4G8 (CA).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: METHOD FOR THE EVALUATION OF VELVET ANTLER



(57) Abstract: The invention provides a method and apparatus using infrared thermography for predicting an unknown value of an internal composition characteristic of velvet antler *in vivo*, *in vitro*, and/or during cooling or warming. The method involves generating a predictive model using a sample population of antlers to determine a relationship between a known input variable and a known value for the composition characteristic; and using the predictive model to predict the unknown value of the same composition characteristic in an antler not selected from the sample population. Using this value, a map can be made to identify sites and levels of the composition characteristic within the antler. The invention provides a method for predicting an internal composition characteristic of a velvet antler by obtaining an infrared thermographic image of the antler and visually ranking the image by comparison to a corresponding image of an antler with the desired composition characteristic. A method to predict maturity by comparing temperature differences between the antler's tip and base is provided.

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SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

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